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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,774	03/11/2004	Yoshifumi Shiraishi	36418	6455
116	7590	04/28/2006	EXAMINER	
PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200 CLEVELAND, OH 44114-3108			VO, ANH T N	
			ART UNIT	PAPER NUMBER
			2861	

DATE MAILED: 04/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/798,774

Applicant(s)

SHIRAISHI ET AL.

Examiner

Anh T.N. Vo

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 13-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-19, 21-25 and 28 is/are rejected.
- 7) ☒ Claim(s) 20, 26 and 27 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/11/04 &amp; 9/26/05</u>   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

Acknowledgement is made of the receipt of Petition to make special under 37 C.F.R. # 1.102(d) filed 26 September 2005.

### ***Election /Restriction***

The election was made without traverse dated 04/11/2006.

### ***Information Disclosure Statement***

The references cited on PTO 1449 have been considered.

### ***Drawings Object to***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the recitations "a claw position detecting part" and "second device" as recited in claims 18 and 25, 28 respectively must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

## **CLAIM REJECTIONS**

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 13-14, 16, 18-19 are rejected under 35 USC 102 (b) as being anticipated by Kawamura (US Pat. 5,577,014).

Kawamura disclose in Figures 1- 4 a coating apparatus comprising:

- a claw (14) operable to protrude into the recessed part (3) or the through hole of the cartridge (1) only when the cartridge (1) is inserted into the cartridge storage space (10) in a correct orientation (Figures 3A-3D);
- a stopper (11) operable to work with said claw (14) such that when said claw (14) protrudes into the recessed part (3) or the through hole of the cartridge (1), said stopper (11) is disposed to allow the cartridge (1) to be inserted and stored the cartridge storage space (10), and when said claw (14) does not protrude into the recessed part (3) or the through hole of the cartridge (1), said stopper (11) is disposed to prevent the cartridge from being inserted and stored in the cartridge storage space (Figures 1-3E, column3, lines 22-59 and column 4, lines 1-20);
- the cartridge (1) being inserted into the cartridge storage space (10) a correct orientation when the cartridge (1) is inserted from a predetermined direction into the cartridge storage space (10) (Figures 3A-3E);
- a plurality of at least one of said claw (14) and said stopper (11) (Figure 1);

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- a claw position detecting part (sensor) operable to detect when said claw protrudes and does not protrude into the recessed part or the through hole of the cartridge, and output a detection result and a determining part (electric circuits) operable to determine whether the insertion of the cartridge is in a correct orientation based on the detection result of said claw position detecting part, and output a determination result (column1, lines 24-31); and
- the cartridge (1) being inserted into the cartridge storage space (10) in a correct orientation when the cartridge (1) is inserted from backside (5) into the cartridge storage space (10) (Figure 3A).

Claims 13-16 and 21-24 are rejected under 35 USC 102 (e) as being anticipated by Sasaki et al. (US Pat. 6,512,653).

Sasaki et al. disclose in Figures 1- 12 a cassette changer comprising:

- a claw (4a) operable to protrude into the recessed part (2a) or the through hole of the cartridge (2) only when the cartridge (2) is inserted into the cartridge storage space (13, 15) in a correct orientation (Figures 3, 5 and 9);
- a stopper (4b) operable to work with said claw (4a) such that when said claw (4a) protrudes into the recessed part (2a) or the through hole of the cartridge (2), said stopper (4b) is disposed to allow the cartridge (2) to be inserted and stored in the cartridge storage space (13, 15), and when said claw (4a) does not protrude into the recessed part (2) or the through hole of the cartridge (2), said stopper (4b) is disposed to prevent the cartridge from being inserted and stored in the cartridge storage space (Figures 3 and 5);
- the cartridge (2) being inserted into the cartridge storage space (13, 15) in a correct orientation when the cartridge (2) is inserted from a predetermined direction into the cartridge storage space (13, 15) (Figures 3 and 5);
- a joint part (4c) operable to join said claw (4a) with said stopper (4b), said joint part (4c) being disposed to rock on a shaft (5) as a fulcrum (Figure 3);
- a plurality of at least one of said claw (4a) and said stopper (4b) (Figure 3);

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- a plurality of cartridge storage parts (3) each of which includes the cartridge storage space for mounting the cartridge (2) (Figure 1);
- a moving mechanism (100) operable to move a selected one of said plurality of cartridge storage parts from a first position, at which a user inserts the cartridge into the cartridge storage space, to a second position which is different than the first position (Figures 1-3);
- a device (4, 13, 15) disposed in at least one of the first position, the second position, and the plurality of cartridge storage parts (Figures 3 and 12);
- the cartridge (2) being inserted into the cartridge storage space (13, 15) in a correct orientation when the cartridge (2) is inserted from backside (2b) into the cartridge storage space (13, 15) (Figure 5);
- the second position being adjacent cartridge inserting point of a cartridge control device (1) used for recording information to and/or reproducing to device information from the information recording medium (Figure 1, column 4, lines 1-19); and
- a cartridge control device (1) disposed in a position adjacent to the second position, said cartridge control device comprising a second cartridge storage part for mounting the cartridge (2) and control part (not shown) operable to record information to and/or reproduce information from the information recording medium (Figures 1 and 6, column 4, lines 1-19).

***Claim Rejections - 35 U.S.C. § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior arts are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 17, 25 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki et al. (US Pat. 6,512,653) in view of Yamakawa et al. (US Pat. 5,402,283).

Sasaki et al. disclose the basic features of the claimed invention as stated above but do not disclose that said device being used with the cartridge which contains a magnetic tape reel within the housing and the recessed part or the through hole of the cartridge being used for inserting a reel base of a cartridge control device that engages with the magnetic tape reel; said cartridge control device further comprising a second device operable to prevent an incorrect insertion of the cartridge into said second cartridge storage part; and said second device containing a projection for preventing the incorrect insertion of the cartridge into the said second cartridge storage part, wherein a notch provided on a corner of the cartridge must be aligned with said projection for correct insertion.

Yamakawa et al. disclose in Figures 3-4, 6 and 10A-10B a magnetic tape library apparatus comprising:

said device (sled pin, not shown) being used with the cartridge (30) which contains a magnetic tape reel (52, 54) within the housing and the recessed part (56a) or the through hole of the cartridge (30) being used for inserting a reel base of a cartridge control device (28) that engages with the magnetic tape reel (column 5, lines 23-24 and column 6, lines 7-15).

said cartridge control device (28) further comprising a second device (sled pin, not shown) being operable to prevent an incorrect insertion of the cartridge (30) into said second cartridge storage part (Figure 3);

said second device containing a projection (sled pin, not shown) for preventing the incorrect insertion of the cartridge (30) into the said second cartridge storage part (28), wherein a notch and/or the recessed part (56a) provided on a corner of the cartridge (30) must be aligned with said projection for correct insertion (Figures 3 and 6, column 6, lines 7-15).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate the teaching of Yamakawa et al. into the Sasaki et al. cassette changer for the purpose of securely engaging between a magnetic tape cartridge (30) and a magnetic tape drive unit (28).

***Citation of Pertinent Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. These prior art references (US Pat. 5,959,803, US Pat. 5,979,755, US Pat. 6,392,987) cited in the PTO 892 form show a cartridge changer which is deemed to be relevant to the present invention. These references should be reviewed.

***Allowable Subject Matter***

Claim 20 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims. This claim would be allowable because none of the prior art references of record discloses a device for preventing an incorrect insertion of a cartridge into a cartridge storage space, the cartridge including an information recording medium disposed within a housing, the housing having at least one of a recessed part and a through hole disposed at a position other than a central position of the housing, the device comprising a determining part being operable to activate at least one of: a suspension operation to suspend the insertion; an operation to inform the user of incorrect insertion; and an ejection operation to eject the cartridge from the cartridge storage space, when the determining part determines that the insertion of the cartridge is not in a correct orientation in the combination as claimed.




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Claim 26-27 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims. These claims would be allowable because none of the prior art references of record discloses a cartridge changer for performing cartridge changing and preventing an incorrect insertion of a cartridge into a cartridge storage space, the cartridge including an information recording medium disposed within a housing, the housing having at least one of a recessed part and a through hole disposed at a position other than a central position of the housing, the cartridge changer comprising a second device being operable to detect that the cartridge has been inserted into a second cartridge storage part in an incorrect orientation. in the combination as claimed.

**CONCLUSION**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Anh Vo whose telephone number is (571) 272-2262. The examiner can normally be reached on Tuesday to Friday from 9:00 A.M. to 7:00 P.M.

The fax number of this Group 2800 is (571) 273-8300.

  
ANH T. N. VO  
PRIMARY EXAMINER  
April 26, 2006